

2.01.06

Read p137

$\gamma = 0.61$ WIS Coding for ARCTANGENT - POLYNOMIAL APPROXIMATION (ATP)
 $K = 0.14$ By D. R. S. Date JUNE 1st 1959 Page 1 of 2

FLOW #	ORDER #	X	TYPE	A	B	C	HEXADECIMAL				
							X	T	A	B	C
			I	[1]	[29]	[1000]	000	0	001	01d	3e8
1	25	E		[863]	[25, 12 →] r [5]		001	019	1	35f	19c 005
2	13	E		[863]	[1, 12] →] θ [18]		002	00d	1	35f	01c 012
3	13	E		[863]	[1, 12] →] θ [19]		003	00d	1	35f	01c 013
4	1	E		[863]	[1, 12] →] β [20]		004	001	1	35f	01c 014
5		A		$r [_] + 0$	[1023] → r [855]		005	000	8	000	3ff 357
6		SA		$ r [2048] - 1$	[1022]	[859]	006	000	8	800	3fe 356
7	25	E		<small>INITIALISE ADD ORDER</small>] C ₁₅ [[20] → [25, 12] 12	[12]		007	019	1	014	19c 00c
8		S		[857]	[857] CLEAR [857]		008	000	a	359	359 359
9		AA		$ r [855] + 1$	[3fe]	[2048]	009	000	9	357	3fe 800
10		D		$ r -1$ [859] $ r +1$ [2048] → R [358]			00a	000	3	356	800 358
11		M		R [2048] × R [2048] → R ² [858]			00b	000	2	800	800 35a
12		A		$C_{2i+1} [21] + \sum CR^i [857] \Rightarrow$	[2048]		00c	000	8	015	359 800
13		M		$\rightarrow [2048] \times R^2 [859] \Rightarrow \sum CR^i [857]$			00d	000	2	800	35a 359
14		A		<small>INCREMENT 'A' ADDRESS OF ADD ORDER</small> [12] [1019] [12]			00e	100	8	00c	3fb 00c
15		TN		<small>NEXT TO LAST CONSTANT?</small> [2048] [16] [12]			00f	000	e	800	010 00c
16		A		<small>ADD LAST CONSTANT</small> $\sum CR^i [28] + C_1 [857] \rightarrow [2048]$			010	000	8	01c	359 800
17		M		$\rightarrow [2048] \times R [856] \Rightarrow \sum CR^i [2048]$			011	000	2	800	358 800
18		A		$\rightarrow \sum CR^i [2048] + \frac{\pi}{4} [29] \rightarrow \theta [_]$			012	000	8	800	01d (000)
19	50	E		<small>INSERT SIGN OF PRINCIPAL VALUE</small> [855] [50, 1] → θ [<u> </u>]			013	032	1	357	321 (000)
20		TU		$] C_{15} [[21] [] \beta [_]$			014	000	5	015	000 000
21				C ₁₅ [<u> </u> .0040540580] []			015	307	8	4d7	e74 355
22				C ₁₃ [<u> </u> .0218612288] []			016	105	b	316	51d 7e0
23				C ₁₁ [<u> </u> .0559098861] []			017	304	e	501	c3c 528
24				C ₉ [<u> </u> .0964250441] []			018	103	c	577	df4 063

WISCoding for ARCTANGENT (ATP)

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